Devi, S.
09/388090

- Key terms
Claim 37

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     FILE 'CAPLUS' ENTERED AT 15:05:00 ON 18 APR 2000
L1             2 SEA ABB=ON  PLU=ON  NGSP
L2          3344 SEA ABB=ON  PLU=ON  (NEISSER? OR N)(W)(GONORRH? OR
                 GONOCOCC?)
L3             7 SEA ABB=ON  PLU=ON  (L1 OR L2)(3A)(POLYPEPTIDE OR
                 POLYPROTEIN OR POLY(W)(PEPTIDE OR PROTEIN))
L4            16 SEA ABB=ON  PLU=ON  (L1 OR L2)(10A)(POLYPEPTIDE OR
                 POLYPROTEIN OR POLY(W)(PEPTIDE OR PROTEIN))
L5            16 SEA ABB=ON  PLU=ON  L3 OR L4

L5   ANSWER 1 OF 16  CAPLUS  COPYRIGHT 2000 ACS
ACCESSION NUMBER:         2000:161171  CAPLUS
DOCUMENT NUMBER:          132:212704
TITLE:                    Neisseria gonorrhoeae
                          polypeptides and nucleic acid sequences
                          for vaccines
INVENTOR(S):              Jackson, W. James; Harris, Andrea M.
PATENT ASSIGNEE(S):       Antex Biologics Inc., USA
SOURCE:                   PCT Int. Appl., 69 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     WO 2000012133      A1   20000309       WO 1999-US20070  19990901
         W:  AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU,
             CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,
             SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:                    US 1998-98685    19980901
AB   The invention discloses a Neisseria gonorrhoeae
     polypeptide (NGSP), polypeptides derived
     therefrom (NGSP-derived polypeptides),
     nucleotide sequences encoding said polypeptides, and
     antibodies that specifically bind the NGSP
     polypeptide and/or NGSP-derived
     polypeptides. Also disclosed are prophylactic or
     therapeutic compns., including antigenic, preferably immunogenic
     compns., e.g. , vaccines, comprising NGSP
     polypeptide and/or a NGSP-derived
     polypeptide or antibodies thereto. The invention addnl.
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discloses methods of inducing an immune response to Neisseria and Neisseria **NGSP polypeptide** and an **NGSP** -derived **polypeptide** in animals.

L5 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1999:632019 CAPLUS
DOCUMENT NUMBER: 131:333505
TITLE: Probing secretion and translocation of a .beta.-autotransporter using a reporter single-chain Fv as a cognate passenger domain
AUTHOR(S): Veiga, Esteban; De Lorenzo, Victor; Fernandez, Luis A.
CORPORATE SOURCE: Departamento de Biotecnologia Microbiana, Centro Nacional de Biotecnologia, Madrid, 28049, Spain
SOURCE: Mol. Microbiol. (1999), 33(6), 1232-1243
CODEN: MOMIEE; ISSN: 0950-382X
PUBLISHER: Blackwell Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The mechanism of protein secretion mediated by the .beta.-domain of the **Neisseria gonorrhoeae** IgA protease, a paradigm of a family of secreted **polypeptides** of Gram-neg. bacteria called autotransporters, has been examd. using a single-chain antibody (scFv) as a reporter passenger domain to monitor the translocation process. Fusion of a scFv to the .beta.-module of the IgA protease allowed us to investigate the passage of the chimeric protein through the periplasm, its insertion into the outer membrane and the movement of the N-terminal moiety towards the cell surface. As the binding activity of the scFv to its target antigen is entirely dependent on the formation of disulfide bonds, the relationship between secretion, folding and formation of S-S bridges could be analyzed in detail. In contrast to the current notion that only an unfolded N-passenger domain can be translocated through the .beta.-domain, our results show that the scFv is able to pass through the outer membrane, albeit at a threefold reduced level, in an active conformation with its disulfide bonds preformed in the periplasm through the action of the DsbA product. These data call for a re-evaluation of the prevailing model for secretion of the N-domain of autotransporters.

L5 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1999:210223 CAPLUS
DOCUMENT NUMBER: 131:2573
TITLE: The comP locus of Neisseria gonorrhoeae encodes a type IV prepilin that is dispensable for pilus biogenesis but essential for natural transformation
AUTHOR(S): Wolfgang, Matthew; Van Putten, Jos P. M.; Hayes, Stanley F.; Koomey, Michael
Searcher : Shears 308-4994

CORPORATE SOURCE: Department of Microbiology and Immunology, University of Michigan Medical School, Ann Arbor, MI, 48109-0620, USA
SOURCE: Mol. Microbiol. (1999), 31(5), 1345-1357
CODEN: MOMIEE; ISSN: 0950-382X
PUBLISHER: Blackwell Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The expression of type IV pili (Tfp) by Neisseria gonorrhoeae has been shown to be essential for natural genetic transformation at the level of sequence-specific uptake of DNA. All previously characterized mutants defective in this step of transformation either lack Tfp or are altered in the expression of Tfp-assocd. properties, such as twitching motility, autoagglutination and the ability to bind to human epithelial cells. To examine the basis for this relationship, we identified potential genes encoding **polypeptides** sharing structural similarities to PilE, the Tfp subunit, within the **N. gonorrhoeae** genome sequence database. We found that disruption of one such gene, designated comP (for competence-assocd. prepilin), leads to a severe defect in the capacity to take up DNA in a sequence-specific manner, but does not alter Tfp biogenesis or expression of the Tfp-assocd. properties of autoagglutination, twitching motility and human epithelial cell adherence. Indirect evidence based on immunodetection suggests that ComP is expressed at very low levels relative to that of PilE. The process of DNA uptake in gonococci, therefore, is now known to require the expression of at least three distinct components: Tfp, the recently identified PilT protein and ComP.

L5 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1999:113576 CAPLUS
DOCUMENT NUMBER: 130:187171
TITLE: Cyclized polypeptide prodrugs
INVENTOR(S): Powell, Michael J.
PATENT ASSIGNEE(S): Boehringer Mannheim Corporation, USA
SOURCE: PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9906072	A1	19990211	WO 1998-US15433	19980724

W: CA, JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: US 1997-54285 19970730
OTHER SOURCE(S): MARPAT 130:187171
AB Cyclized prodrugs of this invention are covalently cross-linked so as to inhibit their ability to perform the usual biol. or metabolic function of therapeutic benefit. Either the polypeptide backbone of the enzyme or the cross link itself contains a cleavable site. In an environment where the enzyme specific for the cleavable site is expressed, the cross-linked prodrug is released from its inhibited state and again becomes capable of exerting its therapeutic effect.

L5 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1999:83282 CAPLUS
DOCUMENT NUMBER: 130:277467
TITLE: Neisseria gonorrhoeae mutants altered in toxicity to human fallopian tubes and molecular characterization of the genetic locus involved
AUTHOR(S): Arvidson, Cindy Grove; Kirkpatrick, Risa; Witkamp, Manon T.; Larson, Jason A.; Schipper, Christel A.; Waldbeser, Lillian S.; O'Gaora, Peadar; Cooper, Morris; So, Magdalene
CORPORATE SOURCE: Department of Molecular Microbiology and Immunology, Oregon Health Sciences University, Portland, OR, 97201, USA
SOURCE: Infect. Immun. (1999), 67(2), 643-652
CODEN: INFIBR; ISSN: 0019-9567
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In an effort to identify potential cytotoxins expressed by Neisseria gonorrhoeae, we have identified a locus that, when mutated in the gonococcus, results in a significant increase in toxicity of the strain to human fallopian tube organ cultures (HFTOC). This locus, gly1, contains two open reading frames (ORFs) which are likely cotranscribed. ORF1 encodes a polypeptide of 17.8 kDa with a signal sequence that is recognized and processed in Escherichia coli and N. gonorrhoeae. The 15.6-kDa processed polypeptide has been obsd. in membrane fractions and filtered spent media from cultures of E. coli expressing gly1 and in outer membrane prepns. of wildtype N. gonorrhoeae. The gly1 locus is not essential for bacterial survival, and it does not play a detectable role in epithelial cell adhesion, invasion, or intracellular survival. However, a gly1 null mutant causes much more damage to fallopian tube tissues than its isogenic wild-type parent. A strain complemented in trans for the gly1 mutation showed a level of toxicity to HFTOC similar to the level elicited by the wild-type parent. Taken together, these results indicate an involvement of the gly1 locus in the toxicity of N. gonorrhoeae to human fallopian tubes.

L5 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1998:397229 CAPLUS
DOCUMENT NUMBER: 129:146676
TITLE: Expression of iron binding proteins and hemin binding activity in the dental pathogen Actinobacillus actinomycetemcomitans
AUTHOR(S): Graber, Katherine R.; Smoot, Laura M.; Actis, Luis A.
CORPORATE SOURCE: Department of Microbiology, Miami University, Oxford, OH, 45056, USA
SOURCE: FEMS Microbiol. Lett. (1998), 163(2), 135-142
CODEN: FMLED7; ISSN: 0378-1097
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Actinobacillus actinomycetemcomitans was found to express a **polypeptide** immunol. related to the **Neisseria gonorrhoeae** FbpA iron binding protein. In addn., the expression of hitB and hitC homologs was detected by Northern blot anal. This periodontal pathogen also expresses a polypeptide homologous to the 31-kDa Haemophilus influenzae protein, which shows amino acid sequence homol. with the FimA and YfeA proteins from Streptococcus parasanguis and Yersinia pestis, resp. Both A. actinomycetemcomitans protein homologs were located within the periplasmic space, and their synthesis was regulated by the iron and hemin concn. of the culture medium. Southern and Western blot anal. together with mol. cloning revealed the presence of a Fur-like repressor, which may control the iron regulation of gene expression in this bacterium. Cultivation in the presence of hemin or Congo red revealed the ability of this organism to bind hemin. This binding activity was further confirmed by isolating Escherichia coli DH5.alpha. clones that produced red and brown colonies on agar plates contg. Congo red and hemin, resp., after transformation with an A. actinomycetemcomitans gene library.

L5 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1997:359156 CAPLUS
DOCUMENT NUMBER: 127:78317
TITLE: Porin polypeptide contributes to surface charge of gonococci
AUTHOR(S): Swanson, John; Dorward, David; Lubke, Lori; Kao, David
CORPORATE SOURCE: Lab. of Microbial Struct. and Function, Natl. Inst. of Health, Hamilton, MT, 59840, USA
SOURCE: J. Bacteriol. (1997), 179(11), 3541-3548
CODEN: JOBAAY; ISSN: 0021-9193
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Each strain of **Neisseria gonorrhoeae** elaborates

a single porin **polypeptide**, with the porins expressed by different strains comprising two general classes, Por1A and Por1B. In the outer membrane, each porin mol. folds into 16 membrane-spanning .beta.-strands joined by top- and bottom-loop domains. Por1A and Por1B have similar membrane-spanning regions, but the eight surface-exposed top loops (I to VIII) differ in length and sequence. To det. whether porins, and esp. their top loop domains, contribute to bacterial cell surface charge, strain MS11 gonococci that were identical except for expressing a recombinant Por1A, Por1B, or mosaic Por1A-1B polypeptide were compared by whole-cell electrophoresis. These porin variants displayed different electrophoretic mobilities that correlated with the net nos. of charged amino acids within surface-exposed loops of their resp. porin polypeptides. The susceptibilities of porin variants to polyanionic sulfated polymers correlated roughly with gonococcal surface charge; those porin variants with diminished surface neg. showed increased sensitivity to the polyanionic sulfated compds. These observations indicate that porin polypeptides in situ contribute to the surface charge of gonococci, and they suggest that the bacterium's interactions with large sulfated compds. are thereby affected.

L5 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1993:100355 CAPLUS
DOCUMENT NUMBER: 118:100355
TITLE: Recombinant hybrid porin epitopes as vaccines against Neisseria gonorrhoeae
INVENTOR(S): Goldstein, Neil; Tackney, Charles
PATENT ASSIGNEE(S): Imclone Systems Inc., USA
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9216643	A1	19921001	WO 1992-US2090	19920313
W: AU, CA, FI, HU, JP, KR, NO, RO, RU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
CA 2105382	AA	19920915	CA 1992-2105382	19920313
CA 2105382	C	19990119		
AU 9217492	A1	19921021	AU 1992-17492	19920313
EP 575553	A1	19931229	EP 1992-910113	19920313
EP 575553	B1	19981216		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
JP 06507545	T2	19940901	JP 1992-509343	19920313
AT 174625	E	19990115	AT 1992-910113	19920313

Searcher : Shears 308-4994

ES 2127217	T3	19990416	ES 1992-910113	19920313
US 5547670	A	19960820	US 1993-124369	19930920
PRIORITY APPLN. INFO.:			US 1991-669528	19910314
			WO 1992-US2090	19920313

AB A chimeric (non)fusion polypeptide that is nontoxic to Escherichia coli comprises .gtoreq.1 antigenic porins selected from porin I.A (P.IA) and porin I.B (PI.B) of N. gonorrhoeae is provided. The chimeric polypeptide can be used as a vaccine against the serovar groups of N. gonorrhoeae. An E. coli expression plasmid pGC26 encoding chimeric GC26 consisting of 2 antigenic fragments selected from porins A and B, resp., was prepd. The GC26 was used to prep. anti-P.IA and -P.IB antibody.

L5 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1992:403172 CAPLUS
DOCUMENT NUMBER: 117:3172
TITLE: Endoglucanase A from Cellulomonas fimi in which the hinge sequence of human IgA1 is substituted for the linker connecting its two domains is hydrolyzed by IgA proteases from Neisseria gonorrhoeae
AUTHOR(S): Miller, Patricia B.; Shen, Hua; Gilkes, Neil R.; Kilburn, Douglas G.; Miller, Robert C., Jr.; Plaut, Andrew G.; Warren, R. Antony J.
CORPORATE SOURCE: Dep. Microbiol., Univ. British Columbia, Vancouver, BC, V6T 1Z3, Can.
SOURCE: FEMS Microbiol. Lett. (1992), 92(2), 199-203
CODEN: FMLED7; ISSN: 0378-1097
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The hinge in IgA1 and the linker in endoglucanase A (CenA) are quite similar. The IgA1 hinge is 18 amino acids long and contains only proline, threonine and serine. The linker in CenA is 27 amino acids long and contains only proline, threonine and a single serine. IgA proteases from N. gonorrhoeae cleave Pro-Ser and Pro-Thr bonds within the IgA1 hinge sequence, but they do not attack CenA. When the linker sequence of CenA is replaced with the hinge sequence of IgA1, the hybrid **polypeptide** is susceptible to the **N. gonorrhoeae** proteases. It is cleaved within the hinge sequence at the same sites as IgA1.

L5 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1989:551626 CAPLUS
DOCUMENT NUMBER: 111:151626
TITLE: Immunological characterization of a human homolog of the 65-kilodalton mycobacterial antigen
AUTHOR(S): Dudani, Anil K.; Gupta, Radhey S.
CORPORATE SOURCE: Dep. Biochem., McMaster Univ., Hamilton, ON, L8N

3Z5, Can.
SOURCE: Infect. Immun. (1989), 57(9), 2786-93
CODEN: INFIBR; ISSN: 0019-9567
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A human mitochondrial protein, designated P1 (63 kilodaltons [kDa]), shows extensive sequence homol. (47% identical residues and an addnl. .apprxeq.20% conserved changes) to the 65-kDa mycobacterial antigen. To understand the relationship of these proteins, the cross-reactivity of several monoclonal antibodies directed against the 65-kDa Mycobacterium leprae antigen towards human, Chinese hamster, chicken, and bacterial cells has been examd. A no. of antibodies cross-react with a 63-kDa antigen in vertebrate cell exts. and stained mitochondria in immunofluorescence studies. Some of these antibodies also reacted with a P1-.beta.-galactosidase fusion protein in recombinant Escherichia coli cells, expressing part of the human P1 protein. These results provide strong evidence that P1 is the mammalian homolog of the 65-kDa antigen. The human P1 protein also shows similarity to a no. of other bacterial and viral proteins including the pol **polyprotein** of human immunodeficiency viruses and the penicillin-binding protein of **Neisseria gonorrhoeae**. The obsd. similarity between human P1 protein and the major antigenic proteins of pathogenic organisms (e.g., 60- to 65-kDa mycobacterial antigen) suggests its possible involvement in autoimmune diseases (e.g., rheumatoid arthritis) by antigenic mimicry.

L5 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1989:179505 CAPLUS
DOCUMENT NUMBER: 110:179505
TITLE: Gonococcal and meningococcal polypeptides, vaccines and diagnostics
INVENTOR(S): Meyer, Thomas F.; Stern, Anne
PATENT ASSIGNEE(S): Max-Planck-Gesellschaft zur Foerderung der Wissenschaften e.V., Fed. Rep. Ger.
SOURCE: Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 273116	A2	19880706	EP 1987-114513	19871005
EP 273116	A3	19900502		

R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
PRIORITY APPLN. INFO.: EP 1986-113993 19861009
AB Polypeptides which include an amino acid sequence constituted of

5-80 amino acid residues and which is capable of immunol. mimicking a conserved antigenic determinant site of a gonococcal opacity protein (Protein II) (I) and/or meningococcal class 5 protein (II) are described. They may be used as diagnostic agents or vaccines for meningitis or gonorrhea.

L5 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1987:208679 CAPLUS
DOCUMENT NUMBER: 106:208679
TITLE: Gene conversion variations generate structurally distinct pilin **polypeptides** in **Neisseria gonorrhoeae**
AUTHOR(S): Swanson, John; Robbins, Kenneth; Barrera, Osmar; Koomey, J. Michael
CORPORATE SOURCE: Lab. Microb. Struct. Funct., Natl. Inst. Allergy Infect. Dis., Hamilton, MT, 59840, USA
SOURCE: J. Exp. Med. (1987), 165(4), 1016-25
CODEN: JEMEAV; ISSN: 0022-1007
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Pilus+ to pilus- phenotype change occurs in N. gonorrhoeae through gene conversion of the complete, expressed pilin gene by nucleotides homologous to the pilS1 copy 5 partial pilin gene; assembly missense pilin is synthesized but pili are not. Reversion to pilus+ occurs by a subsequent recombinational event that replaces the complete pilin gene's pilS1 copy 5-like sequence with nucleotides from a different partial gene to effect expression of an orthodox (i.e., pilus producing) pilin. Sibling pilus+ revertants of common parentage can carry different sequences in their expressed pilin genes because they have undergone nonidentical gene conversion events such as (a) recombinations with sequences from different partial genes, or (b) recombinations with different length nucleotide stretches of the same partial gene; either can yield structurally and antigenically variant pilin polypeptides.

L5 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1986:180783 CAPLUS
DOCUMENT NUMBER: 104:180783
TITLE: **Polypeptides** encoded by cryptic plasmids from **Neisseria gonorrhoeae**
AUTHOR(S): Aalen, Reidunn B.; Gundersen, Wenche Blix
CORPORATE SOURCE: Dep. Biol., Univ. Oslo, Blindern, 0315, Norway
SOURCE: Plasmid (1985), 14(3), 209-16
CODEN: PLSMDX; ISSN: 0147-619X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Almost all clin. isolates of N. gonorrhoeae harbor a small, phenotypically cryptic plasmid of .apprx.4.1 kilobases. Several

polypeptides encoded by 2 variants of such plasmids, 1 (pSB01C) having a deletion of .apprx.50 base-pairs (bp) in comparison with the other (p31788C), were identified, and the position of the genes for 2 of the proteins was detd. The cryptic plasmids were cloned into the HindIII site of the vectors pBR322 and pACYC184. The resulting recombinant plasmids were transformed into the Escherichia coli minicell producing strain DS410 (minB) and the plasmid-encoded proteins analyzed by SDS polyacrylamide gel electrophoresis. The pSB01C derivs. express 2 distinct proteins of 22 and 16 kilodaltons (kDa) and p31788C 2 other proteins of 24 and 18.5 kDa. Addnl., both plasmids express common proteins of 32.5, 9, and 7.5 kDa. The genes coding for the 24- and the 7.5-kDa proteins were mapped by restriction enzyme anal. of Tn5 insertions suppressing their expression. The addnl. 50 bp in p31788C are localized to the coding region of the 24-kDa protein, and the 22-kDa protein of pSB01C is possibly a shortened form of the former due to the lack of 50 bp.

L5 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1986:136069 CAPLUS
DOCUMENT NUMBER: 104:136069
TITLE: Peptide vaccine or diagnostic, and a polypeptide useful therefor
INVENTOR(S): So, Magdalene Y. H.; Deal, Carolyn D.; Hagblom, Per O.
PATENT ASSIGNEE(S): Scripps Clinic and Research Foundation, USA
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8504654	A1	19851024	WO 1985-US565	19850404
W: AU, DK, FI, JP, NO, US				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AU 8541590	A1	19851101	AU 1985-41590	19850404
AU 582358	B2	19890323		
EP 177583	A1	19860416	EP 1985-901876	19850404
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 61501777	T2	19860821	JP 1985-501646	19850404
IL 74829	A1	19890228	IL 1985-74829	19850405
ZA 8502629	A	19851127	ZA 1985-2629	19850409
DK 8505652	A	19851205	DK 1985-5652	19851205
FI 8504839	A	19851205	FI 1985-4839	19851205
FI 81452	B	19900629		
FI 81452	C	19901010		
NO 8504903	A	19860204	NO 1985-4903	19851205

Searcher : Shears 308-4994

PRIORITY APPLN. INFO.: US 1984-597434 19840406
WO 1985-US565 19850404

AB A series of short synthetic polypeptides whose amino acid residue sequences correspond to small segments of the gonococcal pilin protein are used as immunogens in a vaccine prepn. against gonorrhea. Thus, gonococcal pilin protein polypeptides were synthesized by the Merrifield method. The polypeptides were conjugated to a tetanus toxoid carrier and the conjugates were used to detect anti-polypeptide antibody in rabbit antisera. Rabbit antisera that exhibited a 4-fold higher titer than the neg. control were considered pos. for the presence of anti-polypeptide antibodies. These antibodies were able to react pos. with both isolated gonococcal pilin and with whole Neisseria cells. Evidently, these polypeptides induce broad-spectrum antibodies and may be useful as components in broad-spectrum N. gonorrhoeae vaccines.

L5 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1979:538706 CAPLUS
DOCUMENT NUMBER: 91:138706
TITLE: Antigenic **polypeptide** complex from the Melvin strain of **Neisseria gonorrhoeae**: isolation and properties
AUTHOR(S): Karkhanis, Yashwant D.; Anderson, Richard L.; Zeltner, Johanna Y.; Carlo, Dennis J.; Stoudt, Thomas H.
CORPORATE SOURCE: Merck Inst. Ther. Res., Rahway, NJ, 07065, USA
SOURCE: Infect. Immun. (1979), 25(2), 635-44
CODEN: INFIBR; ISSN: 0019-9567
DOCUMENT TYPE: Journal
LANGUAGE: English

AB An antigenic complex was isolated in a highly purified form from the Melvin strain of N. gonorrhoeae. The complex had a mol. wt. of 9.3 .times. 106 and on Na dodecyl sulfate-polyacrylamide gel electrophoresis was found to consist of several subunits; the most predominant had the following mol. wts.: 110,000, 94,000, 68,000, a smear (contg. 52,000, 48,000, and 44,000), 42,000, 36,000, 29,000, 28,000, 26,000, and 12,000 comprising 89% of the total protein. With the exception of the subunit of mol. wt. 110,000, no change in the content or the mobility of other subunits was obsd. when .beta.-mercaptoethanol was omitted from the denaturation soln. of Na dodecyl sulfate electrophoresis. Amino acid anal. of the complex showed a predominance of hydrophobic amino acids. Thus, noncovalent interactions between the subunits were implicated. When the cells were labeled with fluorescamine, a fluorescent complex was obtained with identical properties. Among several buffers used for the isolation of the complex, 0.2 M tris(hydroxymethyl)aminomethane buffer (pH 7.5) gave max. yield with low amts. of lipopolysaccharide and phospholipid; the choice of the buffer for column chromatog. did

not seem to make any difference. The high protein content and low amts. of lipopolysaccharide and phospholipid are characteristic properties of the complex.

L5 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1979:521960 CAPLUS
DOCUMENT NUMBER: 91:121960
TITLE: Antigenic subunit of the **polypeptide** antigenic complex of the Melvin strain of **Neisseria gonorrhoeae**
AUTHOR(S): Karkhanis, Yashwant D.; Anderson, Richard L.; Zeltner, Johanna Y.; Maigetter, Robert Z.; Carlo, Dennis J.; Stoudt, Thomas H.
CORPORATE SOURCE: Merck Inst. Ther. Res., Rahway, NJ, 07065, USA
SOURCE: Biochem. Biophys. Res. Commun. (1979), 89(2), 750-8
CODEN: BBRCA9; ISSN: 0006-291X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB An antigenic subunit of mol. wt. 66,000 daltons has been isolated from the antigenic complex of the Melvin strain of N. gonorrhoeae. Incubation of the complex in 8 M urea at room temp. for 4 h resulted in the dissocn. of the subunit from the complex. It was sepd. from the complex by chromatog. of the incubation mixt. on a Sepharose 6B column in 50 mM ammonium bicarbonate pH 8.5 without 8 M urea and further purified by affinity chromatog. A newly isolated antigenic protein devoid of lipopolysaccharide present in the bacteria was reported.

(FILE 'MEDLINE, BIOSIS, EMBASE, LIFESCI, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS' ENTERED AT 15:09:14 ON 18 APR 2000)
L6 71 S L5
L7 24 DUP REM L6 (47 DUPLICATES REMOVED)

L7 ANSWER 1 OF 24 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
ACCESSION NUMBER: 2000-062150 [05] WPIDS
DOC. NO. NON-CPI: N2000-048684
DOC. NO. CPI: C2000-017184
TITLE: Novel Neisserial polypeptides predicted to be useful antigens for vaccines and diagnostics.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): FRASER, C; GALEOTTI, C; GRANDI, G; HICKEY, E; MASIGNANI, V; MORA, M; PETERSEN, J; PIZZA, M; RAPPUOLI, R; RATTI, G; SCALATO, E; SCARSELLI, M; TETTELIN, H; VENTER, J C
PATENT ASSIGNEE(S): (CHIR) CHIRON CORP; (GENO-N) INST GENOMIC RES
COUNTRY COUNT: 86
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9957280	A2	19991111	(200005)*	EN	
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW					
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW					
AU 9939677	A	19991123	(200016)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9957280	A2	WO 1999-US9346	19990430
AU 9939677	A	AU 1999-39677	19990430

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9939677	A	Based on	WO 9957280

PRIORITY APPLN. INFO: US 1999-121528 19990225; US 1998-83758 19980501; US 1998-94869 19980731; US 1998-98994 19980902; US 1998-99062 19980902; US 1998-103749 19981009; US 1998-103794 19981009; US 1998-103796 19981009

AN 2000-062150 [05] WPIDS

AB WO 9957280 A UPAB: 20000128

NOVELTY - Novel Neisseria meningitis and **N. gonorrhoeae polypeptides** and polynucleotides are disclosed.

DETAILED DESCRIPTION - A protein (I), one of the 1510 amino acid sequences given in the specification, is new.

INDEPENDENT CLAIMS are also included for the following:

(1) a protein (Ia) having 50% or greater homology or (I);

(2) a protein (Ib) comprising a fragment of 7 or more consecutive amino acids from (I);

(3) an antibody which binds to (I), (Ia) or (Ib);

(4) a nucleic acid (II), preferably comprising one of the 1510 polynucleotide sequences given in the specification, which encodes (I), (Ia) or (Ib);

(5) a nucleic acid (IIa) comprising a fragment of 10 or more consecutive nucleotides form (II);

(6) a nucleic acid (IIb) which is complementary to (II);

(7) a vaccine, diagnostic or pharmaceutical composition comprising (I), (Ia), (Ib), (II), (IIa), (IIb), or the antibody of

(3);

(8) the use of the composition of (7) in the manufacture of a medicament for the treatment or prevention of infection due to Neisserial bacteria;

(9) an immunogenic composition comprising (I), (Ia) or (Ib).

ACTIVITY - Antigenic.

MECHANISM OF ACTION - None given.

USE - The proteins, the polynucleotides, antibodies and compositions of the invention are used as vaccines, as diagnostic reagents, and as immunogenic compositions (claimed). The proteins can be used in the manufacture of medicaments for treating or preventing infection due to Neisserial bacteria (e.g. meningitis and septicaemia), to detect the presence of Neisseria bacteria, or to raise antibodies. The proteins may also be used to screen for agonists or antagonists, which may themselves have use as antibacterial agents. The polynucleotides of the invention may also be used in gene therapy protocols.

ADVANTAGE - Neisseria meningitis causes both endemic and epidemic disease. The meningococcal vaccine currently in use induces a poor immune response and short duration of response, and cannot be used in infants. This is because it is a polysaccharide vaccine, which is T-cell dependent, and so cannot be boosted by repeated vaccinations. A need exists for the identification of secreted or surface-exposed proteins that are presumed targets of the immune system and which are not antigenically variable. These proteins would be useful for the development of vaccines against the pathogen. The present invention provides such proteins.

Dwg.0/23

L7 ANSWER 2 OF 24 MEDLINE DUPLICATE 1

ACCESSION NUMBER: 1999217013 MEDLINE

DOCUMENT NUMBER: 99217013

TITLE: The comP locus of Neisseria gonorrhoeae encodes a type IV prepilin that is dispensable for pilus biogenesis but essential for natural transformation.

AUTHOR: Wolfgang M; van Putten J P; Hayes S F; Koomey M

CORPORATE SOURCE: Department of Microbiology and Immunology, University of Michigan Medical School, Ann Arbor 48109-0620, USA.

CONTRACT NUMBER: A127837 (NCRR)
M01 RR 00042

SOURCE: MOLECULAR MICROBIOLOGY, (1999 Mar) 31 (5) 1345-57.
Journal code: MOM. ISSN: 0950-382X.

PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199909

AB The expression of type IV pili (Tfp) by Neisseria gonorrhoeae has

been shown to be essential for natural genetic transformation at the level of sequence-specific uptake of DNA. All previously characterized mutants defective in this step of transformation either lack Tfp or are altered in the expression of Tfp-associated properties, such as twitching motility, autoagglutination and the ability to bind to human epithelial cells. To examine the basis for this relationship, we identified potential genes encoding **polypeptides** sharing structural similarities to PilE, the Tfp subunit, within the **N. gonorrhoeae** genome sequence database. We found that disruption of one such gene, designated comP (for competence-associated prepilin), leads to a severe defect in the capacity to take up DNA in a sequence-specific manner, but does not alter Tfp biogenesis or expression of the Tfp-associated properties of auto-agglutination, twitching motility and human epithelial cell adherence. Indirect evidence based on immunodetection suggests that ComP is expressed at very low levels relative to that of PilE. The process of DNA uptake in gonococci, therefore, is now known to require the expression of at least three distinct components: Tfp, the recently identified PilT protein and ComP.

L7 ANSWER 3 OF 24 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 1999440173 MEDLINE
DOCUMENT NUMBER: 99440173
TITLE: Probing secretion and translocation of a beta-autotransporter using a reporter single-chain Fv as a cognate passenger domain.
AUTHOR: Veiga E; de Lorenzo V; Fernandez L A
CORPORATE SOURCE: Departamento de Biotecnologia Microbiana, Centro Nacional de Biotecnologia, Campus de Cantoblanco, 28049-Madrid, Spain.
SOURCE: MOLECULAR MICROBIOLOGY, (1999 Sep) 33 (6) 1232-43. Journal code: MOM. ISSN: 0950-382X.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200001
ENTRY WEEK: 20000104
AB The mechanism of protein secretion mediated by the beta-domain of the **Neisseria gonorrhoeae** IgA protease, a paradigm of a family of secreted **polypeptides** of Gram-negative bacteria called autotransporters, has been examined using a single-chain antibody (scFv) as a reporter passenger domain to monitor the translocation process. Fusion of a scFv to the beta-module of the IgA protease allowed us to investigate the passage of the chimeric protein through the periplasm, its insertion into the outer membrane and the movement of the N-terminal moiety towards the cell surface. As the binding activity of the scFv to its

target antigen is entirely dependent on the formation of disulphide bonds, the relationship between secretion, folding and formation of S-S bridges could be analysed in detail. In contrast to the current notion that only an unfolded N-passenger domain can be translocated through the beta-domain, our results show that the scFv is able to pass through the outer membrane, albeit at a threefold reduced level, in an active conformation with its disulphide bonds preformed in the periplasm through the action of the DsbA product. These data call for a re-evaluation of the prevailing model for secretion of the N-domain of autotransporters.

L7 ANSWER 4 OF 24 MEDLINE DUPLICATE 3
ACCESSION NUMBER: 1999115537 MEDLINE
DOCUMENT NUMBER: 99115537
TITLE: Neisseria gonorrhoeae mutants altered in toxicity to human fallopian tubes and molecular characterization of the genetic locus involved.
AUTHOR: Arvidson C G; Kirkpatrick R; Witkamp M T; Larson J A; Schipper C A; Waldbeser L S; O'Gaora P; Cooper M; So M
CORPORATE SOURCE: Department of Molecular Microbiology and Immunology, Oregon Health Sciences University, Portland, Oregon 97201, USA.. arvidson@ohsu.edu
CONTRACT NUMBER: RO AI34560 (NIAID)
SOURCE: INFECTION AND IMMUNITY, (1999 Feb) 67 (2) 643-52. Journal code: GO7. ISSN: 0019-9567.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
OTHER SOURCE: GENBANK-AF003941
ENTRY MONTH: 199905
ENTRY WEEK: 19990502

AB In an effort to identify potential cytotoxins expressed by Neisseria gonorrhoeae, we have identified a locus that, when mutated in the gonococcus, results in a significant increase in toxicity of the strain to human fallopian tube organ cultures (HFTOC). This locus, gly1, contains two open reading frames (ORFs) which are likely cotranscribed. ORF1 encodes a polypeptide of 17.8 kDa with a signal sequence that is recognized and processed in Escherichia coli and **N. gonorrhoeae**. The 15.6-kDa processed **polypeptide** has been observed in membrane fractions and filtered spent media from cultures of E. coli expressing gly1 and in outer membrane preparations of wild-type N. gonorrhoeae. The gly1 locus is not essential for bacterial survival, and it does not play a detectable role in epithelial cell adhesion, invasion, or intracellular survival. However, a gly1 null mutant causes much more damage to fallopian tube tissues than its isogenic wild-type parent. A strain complemented in trans for the gly1 mutation showed a level

of toxicity to HFTOC similar to the level elicited by the wild-type parent. Taken together, these results indicate an involvement of the gly1 locus in the toxicity of N. gonorrhoeae to human fallopian tubes.

L7 ANSWER 5 OF 24 MEDLINE DUPLICATE 4
ACCESSION NUMBER: 1998336886 MEDLINE
DOCUMENT NUMBER: 98336886
TITLE: Expression of iron binding proteins and hemin binding activity in the dental pathogen Actinobacillus actinomycetemcomitans.
AUTHOR: Graber K R; Smoot L M; Actis L A
CORPORATE SOURCE: Department of Microbiology, Miami University, Oxford, OH 45056, USA.
CONTRACT NUMBER: AI37781 (NIAID)
SOURCE: FEMS MICROBIOLOGY LETTERS, (1998 Jun 15) 163 (2) 135-42.
Journal code: FML. ISSN: 0378-1097.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199810
AB Actinobacillus actinomycetemcomitans was found to express a **polypeptide** immunologically related to the **Neisseria gonorrhoeae** FbpA iron binding protein. In addition, the expression of hitB and hitC homologs was detected by Northern blot analysis. This periodontal pathogen also expresses a polypeptide homologous to the 31-kDa Haemophilus influenzae protein, which shows amino acid sequence homology with the FimA and YfeA proteins from Streptococcus parasanguis and Yersinia pestis, respectively. Both A. actinomycetemcomitans protein homologs were located within the periplasmic space, and their synthesis was regulated by the iron and hemin concentration of the culture medium. Southern and Western blot analysis together with molecular cloning revealed the presence of a Fur-like repressor, which may control the iron regulation of gene expression in this bacterium. Cultivation in the presence of hemin or Congo red revealed the ability of this organism to bind hemin. This binding activity was further confirmed by isolating Escherichia coli DH5 alpha clones that produced red and brown colonies on agar plates containing Congo red and hemin, respectively, after transformation with an A. actinomycetemcomitans gene library.

L7 ANSWER 6 OF 24 MEDLINE DUPLICATE 5
ACCESSION NUMBER: 97315224 MEDLINE
DOCUMENT NUMBER: 97315224
TITLE: Porin polypeptide contributes to surface charge of gonococci.
AUTHOR: Swanson J; Dorward D; Lubke L; Kao D

CORPORATE SOURCE: Laboratory of Microbial Structure and Function, Rocky Mountain Laboratories, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Hamilton, Montana 59840, USA..
John_Swanson@nih.gov
SOURCE: JOURNAL OF BACTERIOLOGY, (1997 Jun) 179 (11) 3541-8.
Journal code: HH3. ISSN: 0021-9193.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199709
ENTRY WEEK: 19970902
AB Each strain of **Neisseria gonorrhoeae** elaborates a single porin **polypeptide**, with the porins expressed by different strains comprising two general classes, Por1A and Por1B. In the outer membrane, each porin molecule folds into 16 membrane-spanning beta-strands joined by top- and bottom-loop domains. Por1A and Por1B have similar membrane-spanning regions, but the eight surface-exposed top loops (I to VIII) differ in length and sequence. To determine whether porins, and especially their top loop domains, contribute to bacterial cell surface charge, strain MS11 gonococci that were identical except for expressing a recombinant Por1A, Por1B, or mosaic Por1A-1B polypeptide were compared by whole-cell electrophoresis. These porin variants displayed different electrophoretic mobilities that correlated with the net numbers of charged amino acids within surface-exposed loops of their respective porin polypeptides. The susceptibilities of porin variants to polyanionic sulfated polymers correlated roughly with gonococcal surface charge; those porin variants with diminished surface negativity showed increased sensitivity to the polyanionic sulfated compounds. These observations indicate that porin polypeptides in situ contribute to the surface charge of gonococci, and they suggest that the bacterium's interactions with large sulfated compounds are thereby affected.

L7 ANSWER 7 OF 24 MEDLINE DUPLICATE 6
ACCESSION NUMBER: 97261830 MEDLINE
DOCUMENT NUMBER: 97261830
TITLE: The complete sequence, expression in Escherichia coli, purification and some properties of carbonic anhydrase from Neisseria gonorrhoeae.
AUTHOR: Chirica L C; Elleby B; Jonsson B H; Lindskog S
CORPORATE SOURCE: Department of Biochemistry, Umea University, Sweden.
SOURCE: EUROPEAN JOURNAL OF BIOCHEMISTRY, (1997 Mar 15) 244 (3) 755-60.
Journal code: EMZ. ISSN: 0014-2956.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
OTHER SOURCE: GENBANK-Y11152
ENTRY MONTH: 199707
ENTRY WEEK: 19970704

AB The complete nucleotide sequence of the carbonic anhydrase gene from **Neisseria gonorrhoeae** has been determined. The gene encodes a 252-residue **polypeptide** with a molecular mass of 28085 Da. The gene has been cloned and overexpressed in Escherichia coli, and the enzyme has been purified. A 26-residue signal peptide is cleaved off by the E. coli processing machinery. Thus, the isolated enzyme contains 226 amino acid residues with a molecular mass of 25314 Da. Most of the enzyme seems to be produced as a soluble protein located in the periplasm of E. coli. The enzyme is homologous to carbonic anhydrases from the animal kingdom; it is an alpha-carbonic anhydrase. A comparison with the amino acid sequences of human carbonic anhydrases I and II suggests that the secondary structures are essentially intact in the bacterial enzyme but that several loops are much shorter than in the human forms. Most of the active-site residues are identical to those found in the high-activity human isozyme II. The bacterial enzyme has a high CO2 hydration activity with a k(cat) of 1.1 x 10(6) s(-1) and Km of 20 mM at pH 9 and 25 degrees C. The enzyme also catalyzes the hydrolysis of 4-nitrophenyl acetate. The pH/rate profile can be described as a titration curve with pKa of 6.7 and a maximal value of the catalytic second-order rate constant, k(enz), of 130 M(-1) x s(-1).

L7 ANSWER 8 OF 24 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1996-321651 [32] WPIDS
DOC. NO. CPI: C1996-102388
TITLE: Use of nucleic acids in gene therapy - for altering characteristics of at least some of reproductive tract cells of mammal.
DERWENT CLASS: B04 D16
INVENTOR(S): CHARNOCK-JONES, D S; HEAP, R B; SHARKEY, A M; SMITH, S K; HEAP, B R; SMITH, K S
PATENT ASSIGNEE(S): (UYCA-N) UNIV CAMBRIDGE TECH SERVICES LTD
COUNTRY COUNT: 66
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9620013	A1	19960704	(199632)*	EN	40

RW: AT BE CH DE DK ES FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG
W: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG US UZ VN

AU 9642707	A	19960719	(199647)	
EP 799058	A1	19971008	(199745)	EN
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE				
NO 9702935	A	19970822	(199745)	
HU 77338	T	19980330	(199823)	
SK 9700801	A3	19980408	(199824)	
CZ 9701917	A3	19980617	(199830)	
BR 9510408	A	19981110	(199850)	
JP 10511548	W	19981110	(199904)	41
KR 98700874	A	19980430	(199914)	
MX 9704765	A1	19980201	(199954)	
AU 712278	B	19991104	(200003)	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9620013	A1	WO 1995-GB3008	19951221
AU 9642707	A	AU 1996-42707	19951221
EP 799058	A1	EP 1995-941229	19951221
		WO 1995-GB3008	19951221
NO 9702935	A	WO 1995-GB3008	19951221
		NO 1997-2935	19970623
HU 77338	T	WO 1995-GB3008	19951221
		HU 1997-2205	19951221
SK 9700801	A3	WO 1995-GB3008	19951221
		SK 1997-801	19951221
CZ 9701917	A3	WO 1995-GB3008	19951221
		CZ 1997-1917	19951221
BR 9510408	A	BR 1995-10408	19951221
		WO 1995-GB3008	19951221
JP 10511548	W	WO 1995-GB3008	19951221
		JP 1996-520293	19951221
KR 98700874	A	WO 1995-GB3008	19951221
		KR 1997-704336	19970624
MX 9704765	A1	MX 1997-4765	19970624
AU 712278	B	AU 1996-42707	19951221

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9642707	A	Based on	WO 9620013
EP 799058	A1	Based on	WO 9620013
HU 77338	T	Based on	WO 9620013
CZ 9701917	A3	Based on	WO 9620013
BR 9510408	A	Based on	WO 9620013
JP 10511548	W	Based on	WO 9620013
KR 98700874	A	Based on	WO 9620013

Searcher : Shears 308-4994

AU 712278 B Previous Publ. AU 9642707
Based on WO 9620013

PRIORITY APPLN. INFO: GB 1995-20879 19951012; GB 1994-26380 19941224

AN 1996-321651 [32] WPIDS

AB WO 9620013 A UPAB: 19960819

A method for altering 1 characteristic of at least some of the cells of the reproductive tract of a mammalian individual, by the introduction of a nucleic acid into the cells, is new.

Also claimed is the use of a compsn. for carrying out above mentioned method comprising nucleic acid in the prepn. of a substance.

USE - The method can be used to alter the fertility of the individual. It can also be used to express a polypeptide having a local immunological effect, such as a **polypeptide** from HIV, papilloma viruses, Chlamydia or **N. gonorrhoea** (all claimed).

Dwg.0/4 .

L7 ANSWER 9 OF 24 LIFESCI COPYRIGHT 2000 CSA

ACCESSION NUMBER: 97:82919 LIFESCI

TITLE: Support-bound nucleotide probe for Neisseria gonorrhoeae

CORPORATE SOURCE: BEHRINGWERKE AKTIENGESELLSCHAFT

SOURCE: (1996) . US Patent 5525717; US Cl. 536/24.32 435/6 435/91.1 435/871 536/23.1 536/24.3.

DOCUMENT TYPE: Patent

FILE SEGMENT: A

LANGUAGE: English

AB A nucleotide sequence characteristic of Neisseria gonorrhoeae is disclosed. The sequence can be the basis for hybridization type, nucleic acid-based, rapid, in vitro diagnostic assays. The unique nature of the sequence makes it possible to clearly discriminate N. gonorrhoeae from other Neisseria species thus eliminating or substantially reducing the number of false positive readings. A 350 base pair N. gonorrhoeae DNA restriction fragment was cloned after subtractive hybridization to Neisseria meningitidis DNA. In further cloning experiments the sequences adjacent to the original 350 base pair fragment were determined. A portion of this sequence was shown to detect 105 of 106 N. gonorrhoeae strains and no other Neisseria species. In addition to use as detection probes, all or portions of the nucleotide sequence can be used as a ligand for the sandwich capture of N. gonorrhoeae sequences and as primers for in vitro amplification of **N. gonorrhoeae** sequences. The **polypeptides** encoded by the presently disclosed sequence, including antibodies thereto, are also disclosed as are their uses.

L7 ANSWER 10 OF 24 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER: 1993-350818 [44] WPIDS
CROSS REFERENCE: 1996-286454 [29]; 2000-146910 [13]
DOC. NO. CPI: C1993-155682
TITLE: DNA specific for neisseria gonorrhoeae - used for rapid detection of N-gonorrhoeae infection using labelled probes, with reduced incidence of false positive readings.
DERWENT CLASS: B04 D16
INVENTOR(S): BORN, T L; MIYADA, C G
PATENT ASSIGNEE(S): (SYNT) SYNTEX USA INC
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 5256536	A	19931026	(199344)*		18

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5256536	A	US 1990-611528	19901109

PRIORITY APPLN. INFO: US 1990-611528 19901109
AN 1993-350818 [44] WPIDS
CR 1996-286454 [29]; 2000-146910 [13]
AB US 5256536 A UPAB: 20000313
A nucleotide sequence (I) specific for Neisseria gonorrhoeae comprises at least 17 contiguous nucleotides.

Also claimed are: (1) a polynucleotide probe specific for N. gonorrhoeae which is capable of selectively hybridising to the DNA of SEQ ID NO:1 or its complement; (2) a conjugate comprising a label bound to a probe of (1); (3) a method for detecting the presence of N. gonorrhoeae infection which involves: (a) providing, in combination, (i) a medium suspected of contg. N. gonorrhoeae DNA and (ii) at least one probe as in (1), under conditions where complexes of the probe and single stranded N. gonorrhoeae DNA may form; and (b) detecting the complexes; and (4) a kit for carrying out the above assay.

USE/ADVANTAGE - The DNA can be used as the basis for a rapid in-vitro diagnostic assays for N. gonorrhoeae infection. The unique nature of the sequence makes it possible to clearly discriminate N. gonorrhoaea from other Neisseria species thus eliminating or reducing the number of false positive readings. The DNA may also be used as a ligand for the sandwich capture of N. gonorrhoeae and as primers for in vigro amplification of **N. gonorrhoeae** sequences. **Polypeptides** encoded by the sequences may be used to prepare antibodies.

Dwg.0/4

L7 ANSWER 11 OF 24 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1992-349224 [42] WPIDS
DOC. NO. CPI: C1992-155082
TITLE: Recombinant chimeric porin epitope(s) of Neisseria gonorrhoeae - useful in diagnosing and preventing gonococcal infections, is non-toxic in E. coli.
DERWENT CLASS: B04 D16
INVENTOR(S): GOLDSTEIN, N; TACKNEY, C; GOLDSTEIN, N I; TACKNEY, C T
PATENT ASSIGNEE(S): (IMCL-N) IMCLONE SYSTEMS INC
COUNTRY COUNT: 25
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9216643	A1	19921001	(199242)*	EN	63
RW: AT BE CH DE DK ES FR GB GR IT LU MC NL SE					
W: AU CA FI HU JP KR NO RO RU					
AU 9217492	A	19921021	(199303)		
EP 575553	A1	19931229	(199401)	EN	
R: AT BE CH DE DK ES FR GB GR IT LI LU MC NL SE					
JP 06507545	W	19940901	(199439)		
EP 575553	A4	19950705	(199617)		
US 5547670	A	19960820	(199639)		21
EP 575553	B1	19981216	(199903)	EN	
R: AT BE CH DE DK ES FR GB GR IT LI LU MC NL SE					
DE 69227898	E	19990128	(199910)		
CA 2105382	C	19990119	(199914)		
ES 2127217	T3	19990416	(199922)		

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
WO 9216643	A1		WO 1992-US2090	19920313
AU 9217492	A		AU 1992-17492	19920313
			WO 1992-US2090	19920313
EP 575553	A1		EP 1992-910113	19920313
			WO 1992-US2090	19920313
JP 06507545	W		JP 1992-509343	19920313
			WO 1992-US2090	19920313
EP 575553	A4		EP 1992-910113	
US 5547670	A	Cont of	US 1991-669528	19910314
			US 1993-124369	19930920
EP 575553	B1		EP 1992-910113	19920313
			WO 1992-US2090	19920313
DE 69227898	E		DE 1992-627898	19920313

Searcher : Shears 308-4994

		EP 1992-910113	19920313
		WO 1992-US2090	19920313
CA 2105382	C	CA 1992-2105382	19920313
ES 2127217	T3	EP 1992-910113	19920313

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9217492	A	Based on	WO 9216643
EP 575553	A1	Based on	WO 9216643
JP 06507545	W	Based on	WO 9216643
EP 575553	B1	Based on	WO 9216643
DE 69227898	E	Based on	EP 575553
		Based on	WO 9216643
ES 2127217	T3	Based on	EP 575553

PRIORITY APPLN. INFO: US 1991-669528 19910314; US 1993-124369 19930920

AN 1992-349224 [42] WPIDS

AB WO 9216643 A UPAB: 19931115

Polypeptide (I) comprises at least 1 antigenic sequence present in P.IA and at least 1 antigenic sequence present in P.IB of N. gonarheae. It is non-toxic in E. coli. Also new are:- (1) detection of the presence of antibodies specific for P.IA and those specific for P.IB of N. gonorrheae in a sample comprising:- (a) incubating the sample with (I); and (b) detecting the presence of antibody bound to (I); (2) immunisation of a mammal simultaneously against N. gonorrheae serovars IA and IB comprising administering an effective amt. of (I); (3) a vaccine compsn. comprising an effective amount of (I) in a pharmaceutically acceptable medium; and (4) a DNA molecule encoding (I).

USE/ADVANTAGE - (I) is useful in vaccines for the prevention of diseases caused by gonococcal infections, e.g. gonorrhea. In addn. it can be used to diagnose such infections.

In an example mice are hyperimmunised with GC26 to show the efficacy of the chimeric polypeptide (I) to induce anti-P.IA and P.IB humoral response. Bacterial cells contg. the construct are washed and lysed. Protein concn. is determined and 100 mg of (I) or PATH vector alone is injected into female Balb/c mice (8-10 weeks old) along with complete Freund's adjuvant. A 2nd injection of 100 mg is given at 7 days with incomplete Freund's adjuvant and a find injection of 100 mg at 21 days. 7 days after the find injection the animals are bled from the retro-orbital socket of the eye, and the sera isolated by centrifugation. Time of anti-P.IA and P.IB humoral response is determined by ELISA using goat-anti-mouse Ig conjugated to horseradish peroxidase with a suitable chromagen

Dwg.0/0

ABEQ US 5547670 A UPAB: 19961004

Searcher : Shears 308-4994

A polypeptide that is non-toxic in E. coil wherein the **polypeptide** comprises a sequence of P.IA of **N. gonorrhoeae** wherein the sequence is limited to the 25 amino acid sequence given in the specification and a sequence of P.IB of N. gonorrhoeae wherein the sequence is limited to the 27 amino acid sequence given in the specification.
Dwg.0/5

L7 ANSWER 12 OF 24 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1992-299974 [36] WPIDS
CROSS REFERENCE: 1999-008809 [01]
DOC. NO. NON-CPI: N1992-229717
DOC. NO. CPI: C1992-133797
TITLE: **Polypeptide**(s) encoded by PILC1 or PILC2 of **NEISSERIA GONORRHOEAE** - for diagnosis of and vaccination against NEISSERIA infections.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): JONSSON, A; NORMARK, S
PATENT ASSIGNEE(S): (UNIW) UNIV WASHINGTON
COUNTRY COUNT: 35
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9213871	A1	19920820	(199236)*	EN	122
RW: AT BE CH DE DK ES FR GB GR IT LU MC NL OA SE					
W: AT AU BB BG BR CA CH CS DE DK ES FI GB HU JP KP KR LK LU MG MN MW NL NO PL RO RU SD SE					
AU 9214114	A	19920907	(199249)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9213871	A1	WO 1992-US863	19920131
AU 9214114	A	AU 1992-14114	19920131
		WO 1992-US863	19920131

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9214114	A	Based on	WO 9213871

PRIORITY APPLN. INFO: US 1991-648781 19910131
AN 1992-299974 [36] WPIDS
CR 1999-008809 [01]
AB WO 9213871 A UPAB: 19990107

The following are claimed: (A) a recombinant polynucleotide encoding a polypeptide comprising an immunoreactive epitope of a protein encoded in pilC of Neisseria; (B) a vector comprising a recombinant polynucleotide as in (A); (C) a host cell transformed with a vector as in (B); (D) a recombinant expression system comprising a polynucleotide as in (A) operably linked to a control sequence compatible with a desired host; (E) a cell transformed with a recombinant expression system as in (D); (F) a polypeptide produced by a cell as in (E); (G) a purified polypeptide comprising an immunoreactive epitope of a protein encoded in pilC of Neisseria; (H) a recombinant polypeptide comprising an immunoreactive epitope of a protein encoded in pilC of Neisseria; (I) a compsn. comprising purified polyclonal anti-PilC antibodies, where the pilC is of Neisseria; (J) a compsn. comprising a monoclonal antibody (MAb) directed against an immunoreactive epitope encoded in pilC of Neisseria; (K) an oligomer capable of hybridising to a sequence in pilC of Neisseria, where the oligomer comprises a pilC sequence complementary to at least 6 contiguous nucleotides of pilC; (L) a recombinant polynucleotide comprising a DNA sequence of at least 8 contiguous nucleotides from pilC where the pilC sequence is as shown.

USE - The polynucleotides, polypeptides and antibodies can be used, opt. in the form of kits, in the detection of pilC or anti-pilC antibodies for the diagnosis of pathogenic microorganisms contg. type 4 pil

Dwg.0/7

L7 ANSWER 13 OF 24 MEDLINE DUPLICATE 7

ACCESSION NUMBER: 93095112 MEDLINE

DOCUMENT NUMBER: 93095112

TITLE: Identification of highly conserved and species-specific polypeptides of Haemophilus ducreyi.

AUTHOR: Alfa M J; Yang C L; Slaney L A; Kwok A Y; Ronald A R; Jay F T

CORPORATE SOURCE: Department of Medical Microbiology, Faculty of Medicine, University of Manitoba, Winnipeg, Canada..

SOURCE: JOURNAL OF MEDICAL MICROBIOLOGY, (1992 Dec) 37 (6) 413-9.
Journal code: J2N. ISSN: 0022-2615.

PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199303

AB Chancroid is a sexually transmitted diseased caused by Haemophilus ducreyi. The pathological manifestations of chancroid are unique among Haemophilus species and the virulence factors of H. ducreyi that account for these features have not been identified. Some of these virulence factors may be unique components of H. ducreyi, but

attempts to identify H. ducreyi-specific components have been unsuccessful. Four polypeptides--A, B, C and D of 83, 77, 56 and 28 kDa, respectively--were identified with a panel of nine H. ducreyi-specific monoclonal antibodies (MAbs). Polypeptide C was one of the five major proteins in H. ducreyi and demonstrated micro-heterogeneity in SDS-PAGE. Polypeptides A, B and D were present in only small amounts in whole-cell lysates of H. ducreyi. The relative amounts of A and B varied, suggesting that they may be precursor molecules. The unique polypeptides C and D were not exposed on the surface. Polypeptide C was highly soluble and did not appear to be membrane-bound, whereas polypeptide D appeared to partition with the cytoplasmic membrane and was soluble in Sarkosyl. All four polypeptides appeared to be unique to H. ducreyi since MAbs directed against them did not cross-react with H. influenzae, H. parainfluenzae or **Neisseria gonorrhoeae**. The mol. wts of all of these **polypeptides** were conserved throughout 35 clinical isolates collected from 15 cities in eight countries and one reference strain of H. ducreyi that were tested.(ABSTRACT TRUNCATED AT 250 WORDS)

L7 ANSWER 14 OF 24 BIOSIS COPYRIGHT 2000 BIOSIS DUPLICATE 8
ACCESSION NUMBER: 1992:308331 BIOSIS
DOCUMENT NUMBER: BA94:21481
TITLE: ENDOGLUCANASE A FROM CELLULOMONAS-FIMI IN WHICH THE HINGE SEQUENCE OF HUMAN IGA1 IS SUBSTITUTED FOR THE LINKER CONNECTING ITS TWO DOMAINS IS HYDROLYZED BY IGA PROTEASES FROM NEISSERIA-GONORRHOEAE.
AUTHOR(S): MILLER P B; SHEN H; GILKES N R; KILBURN D G; MILLER R C JR; PLAUT A G; WARREN R A J
CORPORATE SOURCE: DEP. MICROBIOL., UNIV. BRITISH COLUMBIA, 300-6174 UNIVERSITY BLVD., VANCOUVER, B.C. CAN. V6T 1Z3.
SOURCE: FEMS (FED EUR MICROBIOL SOC) MICROBIOL LETT, (1992) 92 (2), 199-203.
CODEN: FMLED7. ISSN: 0378-1097.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB The hinge in IgA1 and the linker in endoglucanase A (CenA) are quite similar. The IgA1 hinge is 18 amino acids long and contains only proline, threonine and serine. The linker in CenA is 27 amino acids long and contains only proline, threonine and a single serine. IgA proteases from Neisseria gonorrhoeae cleave Pro-Ser and Pro-Thr bonds within the IgA1 hinge sequence, but they do not attack CenA. When the linker sequence of CenA is replaced with the hinge sequence of IgA1, the hybrid **polypeptide** is susceptible to the **N. gonorrhoeae** proteases. It is cleaved within the hinge sequence at the same sites as IgA1.

L7 ANSWER 15 OF 24 MEDLINE
ACCESSION NUMBER: 92290257 MEDLINE

DOCUMENT NUMBER: 92290257
TITLE: Endoglucanase A from Cellulomonas fimi in which the hinge sequence of human IgA1 is substituted for the linker connecting its two domains is hydrolyzed by IgA proteases from Neisseria gonorrhoeae.
AUTHOR: Miller P B; Shen H; Gilkes N R; Kilburn D G; Miller R C Jr; Plaut A G; Warren R A
CORPORATE SOURCE: Department of Microbiology, University of British Columbia, Vancouver, Canada.
CONTRACT NUMBER: DE60811 (NIDCR)
P30-DK34928 (NIDDK)
SOURCE: FEMS MICROBIOLOGY LETTERS, (1992 Apr 15) 71 (2) 199-203.
Journal code: FML. ISSN: 0378-1097.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199209
AB The hinge in IgA1 and the linker in endoglucanase A (CenA) are quite similar. The IgA1 hinge is 18 amino acids long and contains only proline, threonine and serine. The linker in CenA is 27 amino acids long and contains only proline, threonine and a single serine. IgA proteases from Neisseria gonorrhoeae cleave Pro-Ser and Pro-Thr bonds within the IgA1 hinge sequence, but they do not attack CenA. When the linker sequence of CenA is replaced with the hinge sequence of IgA1, the hybrid **polypeptide** is susceptible to the **N. gonorrhoeae** proteases. It is cleaved within the hinge sequence at the same sites as IgA1.

L7 ANSWER 16 OF 24 MEDLINE DUPLICATE 9
ACCESSION NUMBER: 89339726 MEDLINE
DOCUMENT NUMBER: 89339726
TITLE: Immunological characterization of a human homolog of the 65-kilodalton mycobacterial antigen.
AUTHOR: Dudani A K; Gupta R S
CORPORATE SOURCE: Department of Biochemistry, McMaster University, Hamilton, Ontario, Canada.
SOURCE: INFECTION AND IMMUNITY, (1989 Sep) 57 (9) 2786-93.
Journal code: GO7. ISSN: 0019-9567.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 198911
AB A human mitochondrial protein, designated P1 (63 kilodaltons [kDa], shows extensive sequence homology (47% identical residues and an additional approximately 20% conserved changes) to the 65-kDa mycobacterial antigen. To understand the relationship of these

proteins, the cross-reactivity of several monoclonal antibodies directed against the 65-kDa Mycobacterium leprae antigen towards human, Chinese hamster, chicken, and bacterial cells has been examined. A number of antibodies (Y1-2, ML 30-A2, and F47-9-1) were found to cross-react with a 63-kDa antigen in vertebrate cell extracts and stained mitochondria in immunofluorescence studies. Some of these antibodies also reacted with a P1-beta-galactosidase fusion protein in recombinant Escherichia coli cells, expressing part of the human P1 protein. These results provide strong evidence that P1 is the mammalian homolog of the 65-kDa antigen. The human P1 protein also shows significant similarity (P less than 0.001) to a number of other bacterial and viral proteins including the pol **polyprotein** of human immunodeficiency viruses and the penicillin-binding protein of **Neisseria gonorrhoeae**. The observed similarity between human P1 protein and the major antigenic proteins of pathogenic organisms (e.g., 60- to 65-kDa mycobacterial antigen) suggests its possible involvement in autoimmune diseases (e.g., rheumatoid arthritis) by antigenic mimicry.

L7 ANSWER 17 OF 24 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1989:18850 BIOSIS
DOCUMENT NUMBER: BR36:6527
TITLE: SEQUENCE ANALYSIS OF VARIANT PILIN GENES FROM **NEISSERIA-GONORRHOEAE** P9 AND IMMUNOLOGICAL PROPERTIES OF PILIN **POLYPEPTIDES** ENCODED BY CLONED GENES IN ESCHERICHIA-COLI.
AUTHOR(S): NICOLSON I J; PERRY A C F; HECKELS J E; SAUNDERS J R
CORPORATE SOURCE: DEP. MICROBIOL., UNIV. LIVERPOOL, LIVERPOOL, UK.
SOURCE: POOLMAN, J. T., ET AL. (ED.). GONOCOCCI AND MENINGOCOCCI: EPIDEMIOLOGY, GENETICS, IMMUNOCHEMISTRY AND PATHOGENESIS; 5TH INTERNATIONAL PATHOGENIC NEISSERIAE CONFERENCE, NOORDWIJKERHOUT, NETHERLANDS, SEPTEMBER 15-18, 1986. XV+842P. KLUWER ACADEMIC PUBLISHERS: DORDRECHT, NETHERLANDS; BOSTON, MASSACHUSETTS, USA. ILLUS, (1988) 0 (0), 289-296. ISBN: 90-247-3607-2.
FILE SEGMENT: BR; OLD
LANGUAGE: English

L7 ANSWER 18 OF 24 MEDLINE DUPLICATE 10
ACCESSION NUMBER: 89039253 MEDLINE
DOCUMENT NUMBER: 89039253
TITLE: Nucleotide sequence of the structural gene for class I pilin from Neisseria meningitidis: homologies with the pilE locus of Neisseria gonorrhoeae.
AUTHOR: Potts W J; Saunders J R
CORPORATE SOURCE: Department of Microbiology, University of Liverpool,

UK.
SOURCE: MOLECULAR MICROBIOLOGY, (1988 Sep) 2 (5) 647-53.
Journal code: MOM. ISSN: 0950-382X.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-X07731
ENTRY MONTH: 198902

AB The nucleotide sequence has been determined for the expressed pilin (pilE) locus of Neisseria meningitidis strain C311 which produces class I pili that are antigenically and structurally similar to those of gonococci. The deduced amino acid sequence of the N. meningitidis pilE translation product contains a 7 amino acid N-terminal pre-pilin leader sequence which is identical to that found in gonococcal pilin and which is characteristic of N-methylphenylalanine pili in general. The succeeding N-terminal 53 amino acids are identical to those found in the equivalent position in antigenically variant gonococcal pilins and confirm direct peptide sequencing of the amino-terminus of at least one type of meningococcal pilin. Other regions that are conserved in variant pilin **polypeptides** from **Neisseria gonorrhoeae** are conserved at the amino acid level in the class I meningococcal pilin but the coding DNA contains numerous base substitutions when compared with the equivalent gonococcal pil sequence. Sequences extending downstream for about 140 bp on the 3' side of the coding region for both pilin genes are only about 85% homologous.

L7 ANSWER 19 OF 24 MEDLINE DUPLICATE 11
ACCESSION NUMBER: 87168186 MEDLINE
DOCUMENT NUMBER: 87168186
TITLE: Gene conversion variations generate structurally distinct pilin **polypeptides** in **Neisseria gonorrhoeae**.
AUTHOR: Swanson J; Robbins K; Barrera O; Koomey J M
CONTRACT NUMBER: AI-10615 (NIAID)
AI-19469 (NIAID)
SOURCE: JOURNAL OF EXPERIMENTAL MEDICINE, (1987 Apr 1) 165 (4) 1016-25.
Journal code: I2V. ISSN: 0022-1007.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 198707

AB Pilus+ to pilus- phenotype change occurs in Neisseria gonorrhoeae through gene conversion of the gonococcus' complete, expressed pilin gene by nucleotides homologous to the pilS1 copy 5 partial pilin

gene; assembly missense pilin is synthesized but pili are not. Reversion to pilus+ occurs by a subsequent recombinational event that replaces the complete pilin gene's pilS1 copy 5-like sequence with nucleotides from a different partial gene to effect expression of an orthodox (i.e., pilus producing) pilin. Sibling pilus+ revertants of common parentage can carry different sequences in their expressed pilin genes because they have undergone nonidentical gene conversion events such as recombinations with sequences from different partial genes, or recombinations with different length nucleotide stretches of the same partial gene; either can yield structurally and antigenically variant pilin polypeptides.

L7 ANSWER 20 OF 24 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1986:234250 BIOSIS
DOCUMENT NUMBER: BR30:116746
TITLE: ISOLATION AND CHARACTERIZATION OF A FRAGMENT REQUIRED FOR AUTONOMOUS REPLICATION OF THE BETA LACTAMASE PLASMID PFA-3.
AUTHOR(S): GILBRIDE K A; BRUNTON J L
CORPORATE SOURCE: UNIV. TORONTO, TORONTO, ONTARIO.
SOURCE: 86TH ANNUAL MEETING OF THE AMERICAN SOCIETY FOR MICROBIOLOGY, WASHINGTON, D.C., USA, MAR. 23-28, 1986. ABSTR ANNU MEET AM SOC MICROBIOL, (1986) 86 (0), 155.
CODEN: ASMACK. ISSN: 0094-8519.
DOCUMENT TYPE: Conference
FILE SEGMENT: BR; OLD
LANGUAGE: English

L7 ANSWER 21 OF 24 MEDLINE DUPLICATE 12
ACCESSION NUMBER: 86149857 MEDLINE
DOCUMENT NUMBER: 86149857
TITLE: **Polypeptides** encoded by cryptic plasmids from **Neisseria gonorrhoeae**.
AUTHOR: Aalen R B; Gundersen W B
SOURCE: PLASMID, (1985 Nov) 14 (3) 209-16.
Journal code: P8P. ISSN: 0147-619X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198606
AB Almost all clinical isolates of Neisseria gonorrhoeae harbor a small, phenotypically cryptic plasmid of approximately 4.1 kb. In this study several polypeptides encoded by two variants of such plasmids, one (pSB01C) having a deletion of approximately 50 bp as compared to the other (p31788C), have been identified, and the position of the genes for two of the proteins determined. The cryptic plasmids were cloned into the HindIII site of the vectors

pBR322 and pACYC184. The resulting recombinant plasmids were transformed into the Escherichia coli minicell producing strain DS410 (minA, minB) and the plasmid-encoded proteins analyzed by sodium dodecyl sulfate-polyacrylamide gel electrophoresis. The pSB01C derivatives express two distinct proteins of 22 and 16 kDa and p31788C two other proteins of 24 and 18.5 kDa. Additionally, both plasmids express common proteins of 32.5, 9, and 7.5 kDa. The genes coding for the 24- and the 7.5 kDa proteins have been mapped by restriction enzyme analysis of Tn5 insertions suppressing the expression. The additional 50 bp in p31788C are localized to the coding region of the 24-kDa protein, and the 22-kDa protein of pSB01C is possibly a shortened form of the former due to the lacking 50 bp.

L7 ANSWER 22 OF 24 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1984:10780 BIOSIS
DOCUMENT NUMBER: BR26:10780
TITLE: IDENTIFICATION AND COMPARISON OF 3 NEISSERIAL IMMUNO GLOBULIN PROTEASES.
AUTHOR(S): STAFFORD D C; MULKS M H; PLAUT A G
CORPORATE SOURCE: DEPARTMENT OF MEDICINE, TUFTS-NEW ENGLAND MEDICAL CENTER, BOSTON MASS. 02111.
SOURCE: 83RD ANNUAL MEETING OF THE AMERICAN SOCIETY FOR MICROBIOLOGY, NEW ORLEANS, LA., USA, MAR. 6-11, 1983. ABSTR ANNU MEET AM SOC MICROBIOL, (1983) 83 (0), B126.
CODEN: ASMACK. ISSN: 0094-8519.
DOCUMENT TYPE: Conference
FILE SEGMENT: BR; OLD
LANGUAGE: English

L7 ANSWER 23 OF 24 MEDLINE DUPLICATE 13
ACCESSION NUMBER: 80020331 MEDLINE
DOCUMENT NUMBER: 80020331
TITLE: Antigenic subunit of the **polypeptide** antigenic complex of the Melvin strain of **Neisseria gonorrhoeae.**
AUTHOR: Karkhanis Y D; Anderson R L; Zeltner J Y; Maigetter R Z; Carlo D J; Stoudt T H
SOURCE: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, (1979 Jul 27) 89 (2) 750-8.
Journal code: 9Y8. ISSN: 0006-291X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198001

L7 ANSWER 24 OF 24 MEDLINE DUPLICATE 14

ACCESSION NUMBER: 80026436 MEDLINE
DOCUMENT NUMBER: 80026436
TITLE: Antigenic **polypeptide** complex from the Melvin strain of **Neisseria gonorrhoeae**: isolation and properties.
AUTHOR: Karkhanis Y D; Anderson R L; Zeltner J Y; Carlo D J; Stoudt T H
SOURCE: INFECTION AND IMMUNITY, (1979 Aug) 25 (2) 635-44. Journal code: GO7. ISSN: 0019-9567.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198002

Claim 44

FILE 'CAPLUS' ENTERED AT 15:13:28 ON 18 APR 2000
L8 1 SEA ABB=ON PLU=ON (PTLZ OR P TLZ)(W)NGHTR? OR PTLZNGHTR? OR P TLZNGHTR?
L9 0 SEA ABB=ON PLU=ON L8 NOT L5

FILE 'MEDLINE, BIOSIS, EMBASE, LIFESCI, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS' ENTERED AT 15:14:20 ON 18 APR 2000
L10 0 SEA ABB=ON PLU=ON L8

FILE 'HOME' ENTERED AT 15:14:50 ON 18 APR 2000